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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,518	02/25/2002	Scott Rawlings	6304.610	8643

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EXAMINER

LE, TAN

ART UNIT PAPER NUMBER

3632

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/080,518

Applicant(s)

RAWLINGS ET AL.

Examiner

Tan Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
4a) Of the above claim(s) 34-36, 43-44, 49-51, 55, 57 and 58 is/are withdrawn from consideration.
5) ☒ Claim(s) 40 is/are allowed.
6) ☒ Claim(s) 1-16, 18, 24-33, 37-39, 41, 42, 45-48, 52-54, 56, 59-62 and 64-67 is/are rejected.
7) ☒ Claim(s) 17, 19-23 and 63 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This is the fourth office action for application serial number 10/080,518. This office action is in response to Applicants' amendments filed 09/22/03; 10/07/03 and 02/13/04. Currently, this application contains 67 pending claims numbered 1-67. Claims 60-67 have been added.
2. This application contains claims 34-36, 43-44, 49-51, 55 and 57-58 drawn to an invention nonelected with traverse in the reply filed on 2/21/03. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.
3. New Oath submitted on 9/22/03 with date execution is acknowledged.
4. Amendment to specification filed on 9/22/03 has been entered.

Claim Rejections - 35 USC § 102

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-13, 27 and 60-61 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,189,850 to Liao et al., hereafter "Liao".

Regarding claim 1, Liao discloses a rotatable LCD screen device, comprising a display (1) and a support stand (2); the display comprising a housing having a front, a rear and a screen wherein the screen is mounted on the housing front; a boss (115, 22) projecting from the housing rear; the stand having a bearing surface (23) for receiving the boss and removably and rotatably supporting the display; the stand also having a

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channel with a first end that is open (230) and a second end that is closed (231) and the boss being slidably removable from the channel open end.

Regarding claims 2-3, Liao discloses that the boss is detachably secured to the housing by the carrier (11); and the boss includes a centerline normal to the display and a generally circular cross section normal to the centerline.

Regarding claim 4, Liao also discloses that the boss includes a first end adjacent the housing and a second end spaced from the housing, the second end including a flange (225).

Regarding claims 5-6, Liao further discloses that the bearing surface comprises an arc of a circle and the arc is greater than 180 degrees.

Regarding claim 7, Liao further discloses that the stand comprises a plate member having a thickness, the bearing surface is located in the plate member, and the flange is spaced from the housing by a distance substantially equal to the plate thickness.

Regarding claim 8, Liao also further discloses that the circular arc has a first and second ends spaced apart by a first distance and the boss has a minor axis shorter than the first distance and a major axis longer than the first distance.

Regarding claim 9, Liao discloses the bearing surface having first and second ends and the plate member including first and second walls extending first and second ends.

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Regarding claims 10-11, Liao discloses that the boss is centrally located on the rear housing wherein the housing is rotatable on the stand between a portrait orientation and a landscape orientation

Regarding claims 12 and 13, Liao also discloses at least one stop (122,121) for selectively holding the housing in either the portrait or the landscape orientation with respect to the stand.

Regarding claim 27, Liao also discloses that the boss has a generally T-shaped cross section.

Regarding claims 60-61, the subject matter of these claims are also shown by Liao.

Claims 1-6, 10-13, 27, 37-39, 41-42, 45, 52-54, 56 and 60-61 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,687,939 to Moscovitch

Regarding claim 1, Moscovitch discloses a dual display system comprising: a display (14, 16) and a support stand (20 (Fig. 7) or 158 (Fig. 19) for example); the display comprising a housing having a front and a rear, a screen mounted on the housing front and a boss (32 or 208) projecting from the housing rear; and the stand having a bearing surface (56, 172) for receiving the boss and removably and rotatably supporting the display; the stand also having a channel with a first end that is open (34 or 206) and a second end that is closed (at 36 (Fig. 9), or at 210 (Fig. 19)) and the boss being slidably removable from the channel open end.

Regarding claim 2, Moscovitch also discloses that the boss is detachably secured to the housing (Fig. 20).

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Regarding claim 3, Moscovitch discloses the boss including a centerline normal to the display and a generally circular cross section normal to the centerline.

Regarding claim 4, Moscovitch discloses that the boss includes a first end (182, 190 (Fig. 20)) adjacent the housing and a second end spaced from the housing, the second end including a flange (170).

Regarding claims 5-6, Moscovitch also discloses that the bearing surface comprises an arc of a circle and the arc is greater than 180 degrees.

Regarding claims 10-11, Moscovitch also discloses that the boss is centrally located on the rear housing; and the housing is rotatable on the stand between a portrait orientation and a landscape (vertical) orientation (horizontal) (Figs. 17 & 18).

Regarding claims 12 and 13, Moscovitch further discloses a stop (84) for limiting the rotation of the display with respect to the stand; and at least one stop (tab 82 restricted up to 90degrees) for selectively holding the housing in either the portrait or the landscape orientation.

Regarding claim 27, Moscovitch also discloses the boss having a generally T-shaped cross section (Fig. 20).

Regarding claims 37-39, Moscovitch as discussed in the above claims, therefore also discloses the limitations recited in claims 37-39 are similar to those limitations.

Regarding claims 41-42, claims 41-42 also recite limitations similar to those claimed limitations as discussed above which includes a bearing member mounted on the support; a receiver (boss) mounted on the display wherein the receiver is removably

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and rotatably receiving the bearing member and supporting the housing, are therefore, also disclosed by Moscovitch.

Regarding claim 45, Moscovitch discloses a stand comprising a base; and a support means (18) for rotatably supporting and releasably securing a display on the base.

Regarding claims 52-54, Moscovitch discloses a bearing member mounted on the display (boss); a support (56) mounted on the stand wherein the support is removably and rotatably receiving the bearing member and supporting the housing; the bearing includes at least one opening for receiving at least one projection.

Regarding claim 56, Mocovitch also discloses that the bearing means includes positioning means (62, 178) for positioning the at least one projection with respect to the bearing means.

Regarding claims 60-61, the subject matter of these claims are also shown by Moscovitch.

Claims 1-2, 4-6, 12, 14-16, 18, 24-31, 37-39, 41-42, 45-48, 52-54, 56, 59 and 60-61 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,018,847 to Lu

Regarding claim 1, Lu discloses a hinge axle device for a LCD monitor, comprising a display (not shown) and a support stand (40, 20); the display comprising a housing having a front and a rear, a screen mounted on the housing front and a boss (10, 601) projecting from the housing rear; and the stand having a bearing surface (34,

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35) for receiving the boss and removably and rotatably supporting the display; the stand also having a channel with a first end that is open (21) and a second end that is closed (at end of 20) and the boss being slidably removable from the channel open end.

Regarding claim 2, Lu also discloses the boss being detachably secured to the housing by the carrier (50).

Regarding claim 4, Lu discloses that the boss includes a first end adjacent the housing and a second end spaced from the housing, the second end including a flange (either an end of pivot 10 or element 62).

Regarding claims 5-6, Lu also discloses that the bearing surface comprises an arc of a circle (601, 10) and the arc is greater than 180 degrees.

Regarding claim 12, Lu also discloses a stop (32, 33) for limiting the rotation of the display with respect to the stand.

Regarding claims 14-16, Lu discloses that the stand comprises first and second hingely connected legs and the legs are connected by at least a hinge and the hinge is selectively lockable in at least two positions.

Regarding claim 18, Lu discloses that the hinge comprises at least a balance spring (70).

Regarding claims 24-26, Lu discloses that the hinge is lockable to prevent an angle between the first and the second legs from increasing or decreasing by having a first lock and a second lock (72, 73, 11 generally) and at least one actuator (20, 20) for releasing the first and the second lock respectively.

Regarding claim 27, Lu also discloses that the boss has a generally T-shaped cross section (the pivot 10).

Regarding claim 28, Lu discloses a stand and a display wherein the display comprises a housing having a boss projecting therefrom and the stand comprises first and second hingedly connected supports and a channel in which the boss is removably and rotatably received, the first and second supports being selectively lockable in at least two positions; Lu also discloses the channel having a first end that is open (21) and a second end that is closed (at end of 20) and the boss being slidably removable from the channel open end.

Regarding claims 29-30, Lu discloses the channel being arcuate and the boss including an arcuate outer surface.

Regarding claim 31, Lu, therefore also discloses claims 31 which recites limitations similar to those limitations recited in claims 28-30.

Regarding claim 37, the limitations recited in claims 37 are also similar to those limitations as discussed above in claims 1, is therefore also disclosed by Lu.

Regarding claims 38-39, Lu also discloses the boss having a circular cross section and the boss is mounted at a first location on a first side and therein the first side is substantially smooth at all locations other than the first location.

Claims 41-42 recite limitations similar to those claimed limitations as discussed above which includes a bearing member mounted on the support; a receiver (boss) mounted on the display wherein the receiver removably and rotatably and slidably

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receiving the bearing member and supporting the housing, are therefore, also disclosed by Lu.

Regarding claim 45, Lu also discloses a stand comprising a base (43); and a support means (30, 32, 33) for rotatably supporting and releasably securing a display on the base; the base also having a channel with the first end that is open and a second end that is closed, the display being removable from the channel open end.

Regarding claim 46, Lu discloses the base comprising first and second hingedly connected legs lockable in at least two different angular relationships.

Regarding claims 47-48, Lu discloses that the support means comprises a portion of the first leg; and the support means also comprises a platform (50) rotatably attached to the first leg.

Regarding claims 52-54, Lu also discloses a bearing member mounted on the display rear housing (boss); a support (30, 32, 33) mounted on the stand wherein the support is removably and rotatably receiving the bearing member and supporting the housing; the bearing includes at least one opening (601) for receiving at least one projection; and the support also having a channel with a first end that is open (21) and a second end that is closed (at end of 20) and the bearing being slidably removable from the channel open end.

Regarding claim 56, Lu also discloses that the bearing means includes positioning means (61) for positioning the at least one projection with respect to the bearing means.

Regarding claim 59, Lu also discloses that the stand includes first and second legs for supporting the display at a plurality of different angles with respect with respect to the support surface.

Regarding claims 60-61, the subject matter of these claims are also shown by Lu.

Claims 41-42, 45-48, 52 and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,668,570 to Ditzik.

Regarding claims 41-42, Ditzik discloses a display comprising a housing having a front and a rear and a screen mounted on the housing front; a bearing member (5) mounted on the support (4); a receiver (hole for hinge 5) mounted on the display wherein the receiver removably and rotatably receiving the bearing member and supporting the housing; the receiver also having a channel with first end that is open and a second end that is closed, the bearing member being slidably removable from the channel open end.

Regarding claim 45, Ditzik discloses a stand comprising a base (6, 20, 8, 12, 16); and a support means (20A, 20B, 14A, 14B, 17, 19, 4) for rotatably supporting and releasably securing a display on the base; the base also having a channel (holes in 20 A, 20B) with first end that is open and a second end that is closed (closed at 17) the bearing member being slidably removable from the channel open end.

Regarding claim 46, Ditzik also discloses the base comprising first and second hingedly connected legs (16A, 16B) lockable in at least two different angular relationships.

Regarding claims 47-48, Ditzik discloses that the support means comprises a portion of the first leg; and the support means also comprises a platform (4) rotatably attached to the first leg.

Regarding claim 52, Ditzik discloses a bearing member (for hinge 5) mounted on the display housing; a support mounted on the stand wherein the support is removably and rotatably receiving the bearing member and supporting the housing; the support also having a channel (holes in 20 A, 20B) with first end that is open and a second end that is closed (closed at 17) the bearing member being slidably removable from the channel open end.

Regarding claim 59, Ditzik also discloses the stand includes first and second legs (8, 12) for supporting the display at a plurality of different angles with respect with respect to the support surface.

Claims 28, 31-33 and 37-39 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,251,102 to Kimble.

Regarding claim 28, Kimble discloses a display (16) and a stand (21) wherein the display comprises a housing having a boss (24) projecting therefrom, and the stand

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comprises first and second hingedly connected supports (where the screw/hinge 22 inserted) and a channel (hole for 22) in which the boss is removably and rotatably received, the first and second supports being selectively lockable in at least two positions; the channel also having a first end that is open and a second end that is closed (by 23) the boss being slidngly removable from the channel open end.

Regarding claims 31-33, Kimble discloses a digitizer (16) having a display screen and a stand (21), the digitizer including a housing having a boss (24) and the stand comprising first and second hingedly connected supports (where the screw/hinge 22 inserted) and a channel (L-shaped channel) in which the boss is removably and rotatably received, the first and second supports being selectively lockable in a first position for holding the digitizer at a first angle with respect to a support surface and a second position for holding the digitizer at a second angle with respect to a support surface, wherein the first angle is greater than 45 degrees and the second angle is less than 45 degrees; wherein the first position comprises a display position (Figs 1 or 4) and a second position comprises a tablet position (Fig. 3)

Regarding claims 37-39, Kimble also discloses a housing, a display screen mounted in the housing; and a boss projecting from a first side of the housing, the boss having a flange and the boss also having a circular cross section and the boss is mounted at a first location on a first side and wherein the first side is substantially smooth at all locations other than the first location.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-14, 28-30, 37-39, 41-42, 45, 52-54, 56, 60-62 and 64-67 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,437,975 to Huang.

Huang shows all the subject matters of claims 1-14, 28-30, 37-39, 41-42, 45, 52-54, 56, 60-62, 64-67 as evidently shown on Figures 1-2.

Allowable Subject Matter

6. Claims 17, 19-23 and 63 are objected to, but would be allowable if rewritten independent form to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 09/22/03 have been fully considered but they are not persuasive.

Applicants have been amended claims 1, 28, 31, 37, 41, 45 and 52 to include further limitations such as the channel having a first end that is open and a second end that is closed, the boss being slidably removable from the channel open end as recited in these claims. However, these claims still met by Liao, Moscovitch, Lu, Kimble and Ditzit. The rejections based on Liao, Lu, Moscovitch, Kimble and Ditzik, are therefore maintained.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Le whose telephone number is (703) 305-8244. The examiner can normally be reached on Mon-Fri 9:00-6:00 and alternating Mon..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leslie Braun can be reached on (703) 308-2156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tan Le
June 14, 2004.



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SUPERVISOR, PATENT EXAMINER